AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-26 (canceled).

27. (currently amended): A computer readable medium ~~encoded with operating instructions for implementing a method of coding a motion vector, performed by~~ storing a program for causing a computer to implement functions of coding a motion vector, ~~the method~~ said functions comprising:

> performing an affine motion estimation to obtain of affine motion parameters;

> converting the affine motion parameters to a predetermined number of translational motion vectors; and

> coding the difference between the converted translational motion vectors of a current

block and the converted translational motion vectors of a previous block.

28. (currently amended): A computer readable medium ~~encoded with operating instructions for implementing a motion estimation method performed by~~ storing a program for causing a computer to implement functions of coding a motion vector, ~~the method~~ said functions comprising:

> performing an affine motion estimation to obtain affine motion parameters; and

> converting the affine motion parameters to a predetermined number of translational

motion vectors.

29. (previously presented): The computer readable medium of claim 28, further

comprising quantizing the converted translational motion vectors to fixed-point numbers having

a predetermined accuracy.

30. (currently amended): A computer readable medium ~~encoded with operating~~

~~instructions for implementing a method of decoding a motion vector, performed by~~ storing a

program for causing a computer to implement functions of decoding a motion vector, ~~the method~~

said functions comprising:

receiving encoded data;

decoding the received data to obtain translational motion vectors;

converting the obtained translational motion vectors to affine motion parameters; and

performing motion compensation using the obtained affine motion parameters.

31. (new): The computer readable medium of claim 27, wherein the affine motion

parameters are used to determine a motion of each pixel in a block of an image, wherein the

motion varies for the each pixel in the block based on values of the affine motion parameters and

a location of the each pixel in the block of the image.

32. (new): The computer readable medium of claim 27, wherein each of the

predetermined number of the translational motion vectors specifies a motion of each of a

plurality of blocks in an image, wherein the predetermined number of the translational motion

vectors is equal to a number of the plurality of blocks in the image, wherein each of the plurality of blocks includes a plurality of pixels.

33. (new): The computer readable medium of claim 28, wherein the affine motion parameters are used to determine a motion of each pixel in a block of an image, wherein the motion varies for the each pixel in the block based on values of the affine motion parameters and a location of the each pixel in the block of the image.

34. (new): The computer readable medium of claim 28, wherein each of the predetermined number of the translational motion vectors specifies a motion of each of a plurality of blocks in an image, wherein the predetermined number of the translational motion vectors is equal to a number of the plurality of blocks in the image, wherein each of the plurality of blocks includes a plurality of pixels.

35. (new): The computer readable medium of claim 30, wherein the affine motion parameters are used to determine a motion of each pixel in a block of an image, wherein the motion varies for the each pixel in the block based on values of the affine motion parameters and a location of the each pixel in the block of the image.

36. (new): The computer readable medium of claim 30, wherein each of the obtained translational motion vectors specifies a motion of each of a plurality of blocks in an image, wherein a first number of the translational motion vectors is equal to a second number of the

plurality of the blocks in the image, wherein each of the plurality of the blocks includes a

plurality of pixels.